

# Meeting Notes and Actions

Revision history Draft 0.1 (BNL, June 16)

These are notes describing issues and actions from the breakout sessions of the GO-ESSP meeting at BADC in June 2005.

#### **CF Breakouts**

- 1. CF Broad Issues
  - a. Technical
    - i. Mailing List, Audit Trail Mechanism (CVS?), Website, "Standards-Forge", Bugzilla
  - b. Social, need:
    - i. "Guardians", active "Secretaries" (CF itself, standard names ...)
    - ii. Due process, both internally and wrt other organisations
    - iii. Decisions on importing versus copying, and componentisation
- 2. CF Issues
  - a. Staggered Grids
  - b. GIS Info
  - c. Ontologies and Semantics
  - d. Discovery Info (a la Ethan)
  - e. Coordinate System Object Model
  - f. Scientific Data Types
  - g. Station Data
  - h. "Measured Parameters" (e.g. radar signal strength, which have yet to be turned into geophysical measurements).
  - i. Dictionaries (a la Roy).
  - j. What does CF compliance mean?
- 3. CF Funding
  - a. BADC hope 50% FTE from 2006.
  - b. Subscription Mechanisms? The Consortium Approach. Split organisation management concepts from science management concepts.
    - i. Org Management:
      - 1. Who holds the cash?
      - 2. Voting? Regional? Geographical Balance? Community Balance? Discipline balance (CF dominated by modellers at the moment, need more obs input?).
  - c. Benevolent Organisations (contributing in kind):
    - i. NCAS (BADC tbd?, and CF checker deployment, CGAM, CF checker maintenance)
    - ii. Unidata (reference implementations?)
  - d. Can we get "Favoured Nation" status from WMO?
    - i. Feeding in and receiving blessing from WMO
    - ii. Get to the Commission for Climatology
- 4. CF Feedback from Group A
  - a. Yes: to separating out standard name management from the rest
  - b. Yes: this is a GO-ESSP issue (at least at this meeting where we have funded the CF authors to attend)
  - c. Yes to modification methodology:
    - i. Proposal Volunteered
    - ii. Discussion

- iii. Provisional Resolution
- iv. Trial Implementations
- v. Re-assess
- vi. Harmonisation, Public Review
- vii. Decisions (relying on consensus)
- d. Implementations are key to this. Test applications the most complete appear to be the IDV and CDAT. Others include Ferret, Ingrid, general java clients.
  - i. Need a reference library.
- e. Should backwards compatibility be sacrosanct?
- f. Module Compliance rather than entire compliance?
- g. Justifications for compliance: Application building, Curation
- h. Priorities (for funding deployment)
  - i. Moderating the mailing list (taking over from Brian)
  - ii. Issue Tracker (minimally just a threaded email site plus simple issues list)
  - iii. Name maintenance
  - iv. Web Site
  - v. Technical Writing
  - vi. Reference Implementations (can we prevail on unidata)
  - vii. CF checker (can CGAM and BADC continue to maintain/deploy these?)
- i. Guardian Committee should include at least: modeller, data manager, software developer, observational expert, chair. Note that no casting vote should be necessary, "No consensus, no decision".
- j. Solutions must bridge the Atlantic.
- 5. CF Feedback from Group B (additional to that above)
  - a. CF version 1.0 needs to commit to data that has already been written
  - b. WMO/IPCC authority and WGCM committees need to be aware and involved.
  - c. Speed of development should not be reduced by process
  - d. Annual GO-ESSP could include a CF workshop component.
- 6. CF Feedback from Group C (additional to that above)
  - a. Process needs formalisation
  - b. Need to identify clearly the communities and ownership (biology & chemistry, in or out?, if out, how to include?)
    - i. impacts community?
    - ii. modellers (global, mesoscale, finer)
    - iii. observational
  - c. Core and special sections even within vocab? Exploit namespaces better.
  - d. Directory of CF tools?
- 7. CF Decisions
  - a. We say the current version is 1.0. However, station and trajectory data support should be unwrapped.
    - i. check this with the mailing list.
- 8. CF Action Timetable
  - a. White Paper (first draft, end of July, Bryan and Steve)
  - b. CF authors to review (August)
  - c. Public Discussion (September)
  - d. CF authors agree to hand over to new structures and timetable
  - e. Establish New Structures (committee memberships, October)
  - f. New Committee takes forward consortium proposal
  - g. Lightweight Issue Tracker (November)
  - h. Onto CF 1.0 Review ...

Meanwhile, everyone to try and get institutional buy in.

## **Discovery Breakouts**

- 9. Notes on WMO Activities (from Gil's ad hoc explanations):
  - a. WMO core schema 0.2 is an implementation of ISO19115 (itself just a content standard).
  - b. Done without GML
  - c. There is an ad hoc group (who? Gil to publicise) running this.
  - d. Feed experiences and proposed changes to Gil/Luca/Jeremy
  - e. Note that SIMDAT not using it internally, using "Travelling Metadata", but outsiders will see ISO19115. (TM is to reduce volume for GTS type data granules).
  - f. Concentrating on real time data.
  - g. How does it do the link back to the data?
    - i. This is the key implementation issue a la DIF/Thredds etc.
  - h. Note Beijing meeting in September.
    - i. Gil to find out how open this is.
- 10. Linking metadata to data.
  - a. Specific data URL addition to DIF has been proposed.
    - i. should this actually be a collection of services?
    - ii. should it have both a service type and dataset identifier, not just a URL?
    - iii. Difficult to keep up to date?
  - b. Two paradigms to consider: real time v static.
  - c. Need Global Identifiers
    - i. need to be hierarchically managed, authority to grant authority, requires resolvers?
    - ii. barcodes?
    - iii. have been pilot projects ad nauseum, can we just do something?
    - iv. Z3980 register unique idenifier systems
    - v. DOI?
    - vi. Gil to fish out a WMO proposal in this area?
    - vii. Need a clear idea of the domain over which the identifier is expected to be unique.
  - d. Issue of Aggregation dataset identifiers and how one handles them in discovery.
  - e. Publication and Provenance need to be included (Lineage, and lists of constituent identifiers).
  - f. Luca to make some proposals (based on some principles that we can agree, and then exchange records based on).
- 11. Proliferation of data copies. How does a search engine cope?
  - a. Order response by provenance (not linear)
  - b. Publish a dataset, and others should expose copies, and distinguish between.
  - c. Data copied from one place to another, then the identifier should remain the same, what about if the serialisation differs (well, if the dataset is no longer bit-compatible), then it's not the same one. But heritage belongs in provenance.
  - d. Hashcodes /MD5sums etc/Payload

#### 12. OAI

- a. We should aim for automatic OAI systems by next meeting. NCAR, NDG plus whoever else.
- b. Avoid replication.
  - i. Unless original unobtainable (firewall)
  - ii. OAI has a friends indicator (identifier, need to exploit this)
  - iii. Registries
- c. Discovery needs to consider layers, drilling, browsing
- 13. IOC Relationship
  - a. Note Greg Reed has been charged with developing a marine profile of ISO19115 (in the MEDI context?)
  - b. Two meeting in the UK in late July (vocab issues @ BODC, structure issues in Exeter).

#### **Model Metadata**

- 14. Numerical DIF extension
  - a. Needs circulation. This will happen as soon as Bryan writes it up.
  - b. Generic Issue: how to extend DIF locally, what is the best practice?
    - i. Use of container schemas? Michael to thresh this out in a longer email.
- 15. Model metadata important (here aimed towards consumers rather than reruns or for couplers).
- 16. IPCC testbed of concepts.
  - a. Earley Suite
    - i. Start by promulgating "V1" of the Earley Suite Schema (including some Balaji concepts)
      - 1. improve the time elements
    - ii. Apply this by hand to the IPCC datasets
    - iii. Produce xml and a db interface and hand back to PCMDI as a showcase for the new schema.
    - iv. Aim to do this by the end of summer.
  - b. DIF extension (aka Summary Model Metadata)
    - i. propose to GCMD in parallel with
    - ii. test by summarising the results of the Earley Suite IPCC work
    - iii. try and produce an XSLT from the Earley Suite docs to this.
      - 1. (NDG will try to do this)

### General

- 17. Original "working groups" (Access Control, IO Subsystems, Model Metadata, OAI Harvesting, Search and Discovery, Standardisation) no longer quite ideal. Better to think about the "pilot projects".
- 18. 2005/06 GO-ESSP Pilots (and named "leaders" include):
  - a. access control (NCAR/NDG experiments to take place in early 2006, Luca/Phil)
  - b. metadata
    - i. Simulation Summary (for DIF) (Jamie)
    - ii. Simulation Metadata (Lois)
    - iii. CF colocation (tbd: chair of the CF committee)
  - c. discovery (Michael)
    - i. OAI harvesting best practice doc (namespace issues, tutorials)
    - ii. OAI harvesting "in place"
  - d. standardisation
    - i. WCS/WMS experiments (watch Galeon, encourage Unidata to come to next GO-ESSP to talk about this)
    - ii. all working on this
  - e. portals
    - i. Live-Access Server Developments
      - 1. security
      - 2. restructuring.

# **Next Steps (apart from pilot projects):**

- Bryan to circulate email addresses of all attendees (underway)
- Bryan to collect all presentations and provide to Chris for linking to agenda at website (underway).
- Gil to provide more info on WMO core group and mechanisms for getting involved, also to find a WMO doc on unique identifiers.